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ABSTRACT

This document is the final report on the Pregnant Adolescent Substance Abuse Project (PASAP) conducted in Prince Georges County (Maryland) in 1987 and 1988. The PASAP consisted of two components that operated independently: an Early Intervention Program that increased the proportion of pregnant adolescent substance users who were using various remediation resources in the county, and the Preventative Program that offered presentations of information and discussion to high school students on the risks of substance use for pregnant and parenting women. The early intervention program enhanced screening for substance abusers through interviews of 403 young women at county Maternal Health Clinics, of whom 191 (47 percent) were referred to appropriate remediation services as abusers or as at-risk to be substance abusers. The prevention program reached 1,900 high school students with a 1-hour film presentation and discussion dealing with the risks of substance abuse for pregnant and parenting women. Evaluation of the two components showed that the programs did help to increase referrals to treatment in the intervention program and improvement in attitude, knowledge, and behavioral intent in the prevention program. Statistical data are provided in two tables and six figures. Appendices contain a 28-item client questionnaire and 3 goal timetables for various components of the program. (JB)

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PREGNANT ADOLESCENT SUBSTANCE ABUSE PROJECT

Final Report

National Public Services Research Institute

8201 Corporate Drive, Suite 220

Landover, MD 20785

Targeted Pregnant Teenage Substance Abuse Project

Grant Number 5 H84 AD01000-03

Grant Type - Targeted

OSAP Funding Duration - 3 Years

Principal Investigator - A. James McKnight 301-731-9891

The Pregnant Adolescent Substance Abuse Project (PASAP) was initiated in 1987 for the purpose of identifying, and intervening with pregnant adolescents determined to be at risk of being or becoming users of tobacco, alcohol and other drugs. Under the program, 403 young women were interviewed. Based on those interviewed, 191 (47 percent) were found to be at risk and were referred to treatment or provided counseling. In 1988 a prevention program reached 1900 high school students with a one-hour presentation and discussion dealing with the risks of substance use for pregnant and parenting women. PASAP led to significant gains and served effectiveness measures and was adopted by the County in late 1989.

Date of submission - October 25, 1990.

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PROJECT DESCRIPTION

The Pregnant Adolescent Substance Abuse Project (PASAP) consisted of two components: Early Intervention Programs and Preventive Programs. The operation of these programs is depicted graphically in the diagram on the next page. While the two programs took place within the same community, they operated quite separately, dealing with separate groups of adolescents. Therefore they can be discussed separately.

Early Intervention

The goal of the Early Intervention Program was to increase the proportion of pregnant adolescent substance users making use of various remediation resources in Prince George's County (County). This was achieved in two ways: through better screening for substance use among the pregnant adolescent population and by referring those who have been identified as substance users or at risk of becoming so, to appropriate remediation services for help.

Screening Process

Pregnant adolescents participating in Maternal Health Clinics throughout Prince George's County were interviewed by representatives of the project staff in order to assess the risk of substance abuse. Interviews were held in 6 of the 11 Maternal Health Clinics in the county. The five in which interviews were not held were too small to produce appreciable numbers of pregnant adolescents. However, since the participating clinics accounted for all but a small percentage of pregnant adolescents, they were able to provide a sample that was sufficiently large and was representative of pregnant adolescents throughout the County.

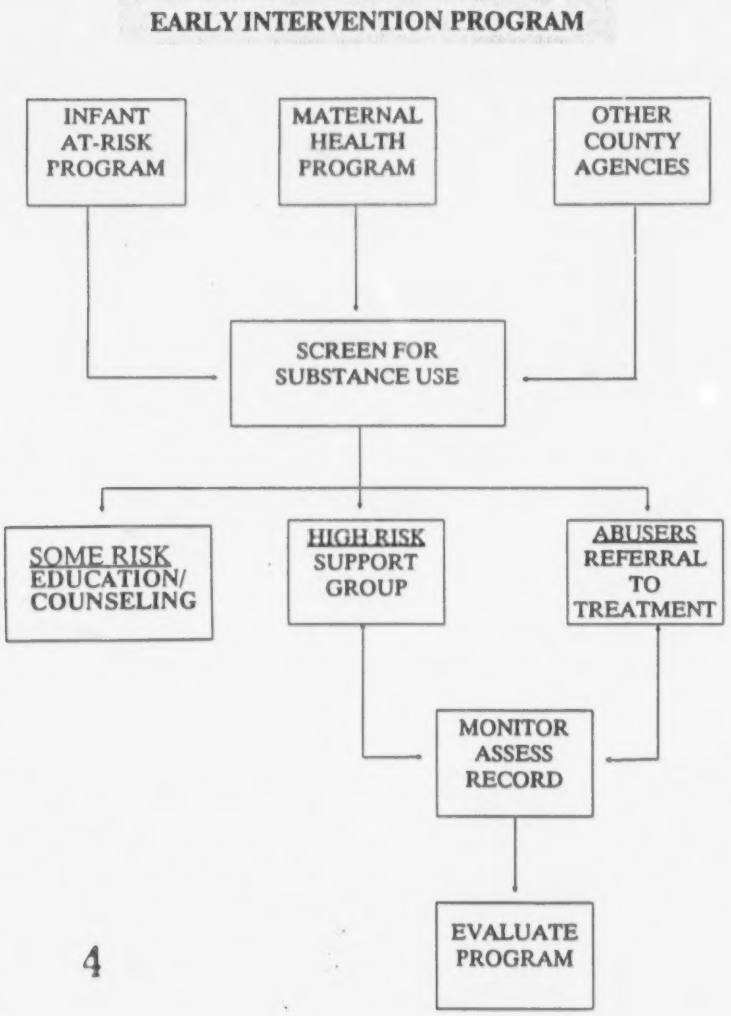
The objective of the screening process was not simply to identify women who were abusing alcohol and drugs. At-risk pregnant and parenting adolescents also include:

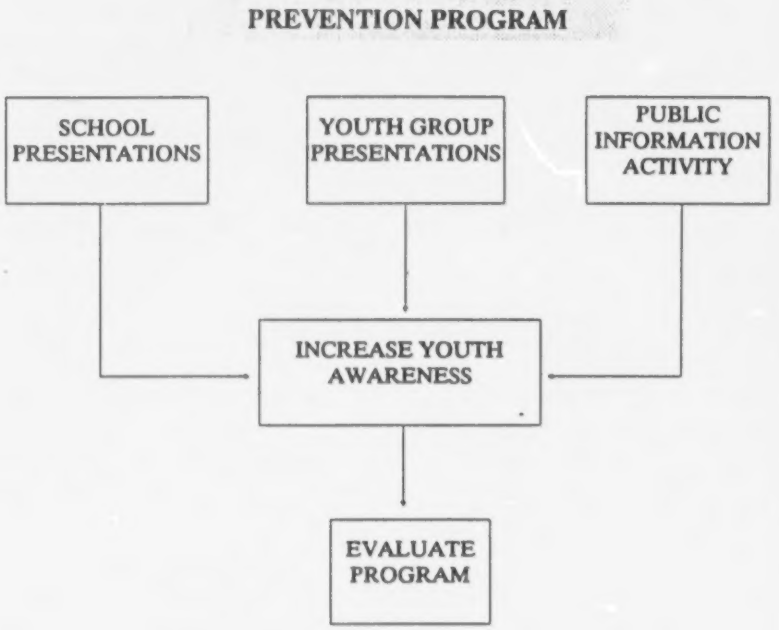
> *Casual users* — Small amounts of tobacco or alcohol can be harmful to the fetus and therefore represent risk among the pregnant population.
>
> *Potential abusers* — The stresses of pregnancy and parenting among the adolescent increase the likelihood of using various harmful substances and therefore elevate the degree of risk represented by previous use. The use by relatives or friends are other known "risk factors".

It must be acknowledged at the outset that pregnant women participating in Maternal Health Clinics are not representative of pregnant adolescents at large, particularly with respect to substance abuse. Studies show that women who do not receive prenatal care have a higher incidence of drug use than those who do. However, early intervention can only take place where there is contact with the population at risk and Maternal Health Clinics offer one of the few opportunities for contact with pregnant women.

While the overwhelming majority of adolescents interviewed came from Maternal Health Clinics, a small number came from the other sources. One such source was the "Infant At-Risk" program under which newborn infants considered to be health risks received special care. One risk indicator is the presence of harmful substances within the mother or child. While substance abusing mothers identified through this source were obviously no longer pregnant, they were interviewed and subject to referral in the same manner as those pregnant adolescents identified through the clinics. The remaining source consisted of obstetricians. A mailout to all obstetricians within the County invited assistance in intervening with pregnant adolescents believed to be at-risk. While project records do not indicate the source of interviewees, the number coming from the Infant

PREGNANT ADOLESCENT SUBSTANCE ABUSE PROGRAM [PASAP]





At-Risk program and private obstetricians did not amount to more than a very small proportion of the entire sample.

Those clients who were identified as not being at risk of substance abuse were provided an informational program concerning the effects of alcohol and drugs upon them and upon their ability to function as a parent. The objective was to reduce the likelihood of their returning to, or taking up the use of substances at a later time.

Interview Guide

Project staff developed a Health Interview Guide as the tool for identifying pregnant adolescents who might be considered as being at risk for substance abuse. The interview was structured such that the issue of drug use was not immediately discussed. It was believed that, in order to obtain a more accurate description of mothers relating to drug use, the adolescents should not feel threatened by the sensitivity of the drug issue. Such would have prevented the project staff from building a rapport with the adolescents in the short time they had with the client. The interview was developed and pre-tested on pregnant adolescents with the aid of maternal health nurses in nearby Anne Arundel County, Maryland. A copy of the interview guide appears as **Appendix A.**

Training Maternal Health Nurses

The initial project plan called for a series of workshops designed to train maternal health nurses and child health nurses in better identifying "at-risk" adolescents. Each workshop amounted to a one-hour program describing stress factors leading to substance use, the effects of use upon mother and fetus, and the behavioral/physical manifestations of drug use. We expected the instruction received in this workshop would enable maternal health nurses to identify clients at risk of substance abuse and call them to the attention of the project staff who would then refer them to the appropriate remedial sources.

It soon became apparent that the public health nurses were not the most appropriate source of interviewers. Briefly stated, they lacked three important prerequisites for carrying out the type of screening interview needed:

Time — The most serious limitation was the lack of time needed to carry out the type of interview needed to reveal substance abuse and risk of abuse. Generally speaking, they were overburdened to begin with and could not accommodate the additional workload.

Ability — A successful screening interview required abilities beyond those that could be developed within a one-hour interview. Moreover, the type of rapport with clients needed to ferret out the use of substances and appraise the degree of risk requires abilities that cannot be easily taught.

Continuity — As will be noted in a moment, screening and referral are best treated as one continual process. Nurses are simply unable by time and job description to provide this continuity.

While the nurses were unable to carry out the screening process as originally planned, their cooperation was indispensable. Without their aid, few of the pregnant adolescents in clinics would have been induced to participate in the screening interviews. The workshop turned out to be an important aid in enlisting the cooperation and assistance of the nurses.

Referral

The original project plan called for referring pregnant adolescent substance abusers to available County facilities for treatment. It quickly became apparent that less than 10 percent of those interviewed could be classed as "substance abusers" and as appropriate referrals to County treatment centers. A much larger proportion , close to half, evidenced risk of substance abuse in that they used substances prior to becoming pregnant, lived with or associated with substance abusers, or gave other indications of risk. (The characteristics of the at-risk population will be provided later in "Description of Population Served.")

Recognizing the diversity of the at-risk population, three different referral patterns were created:

- Education
- Support
- Treatment

Education

Those whose risk was considered minimal were provided a brief educational program. This group consisted of adolescents who had never used harmful substances nor associated with people who had, as well as a "some risk" group who had some experience with gateway drugs in the form of smoking or occasional use of alcohol. Because of the potential threat that these substances posed to the unborn child, some form of intervention was necessary. However, referral to treatment or a participation in the support group would have been rejected outright.

The educational program consisted of watching a project-developed video (see "Product Development"), reading of project-developed brochures and other materials dealing with potentially dangerous substances, and discussing various substances with the Project Case Worker.

Support

Between clients identified as being at "some risk" and those who were chemically dependent, were a group identified as being at "high risk." These included clients who had been abusers before becoming pregnant, had lived or otherwise associated with abusers, or otherwise showed a clear and present danger of becoming substance abusers.

This group was not provided for under any existing remedial service. While a brief educational experience clearly did not meet their needs, they were not candidates for, nor would they accept referral to, a substance abuse treatment program. The type of service most suited to their needs was a "support group," a group of individuals facing similar problems and therefore having the experience, patience, and credibility to help one another. As far as chemical substances are concerned, the two best known support groups are Alcoholics Anonymous and Narcotics Anonymous. While both of these groups were available, the constituency consisted primarily of older male recovering substance abusers having little in common with adolescent females who were only at risk of substance abuse. Moreover, the PASAP clients found it difficult to attend meetings due to lack of transportation and any means of providing child care after the mother had delivered.

Probably the most significant discovery of PASAP was the need for a support group tailored specifically to the needs of pregnant and parenting young women. Six months after PASAP began — the beginning of the second grant year — a support group was created. Because the support

group formed a major component of the PASAP program, it will be more fully described in a separate section.

Treatment

Under the terms of the PASAP program, pregnant and parenting adolescents interviewed identified as being current substance abusers, were referred to the Prince George's County Drug Intervention Council Action Program (DICAP). This outpatient program provides services to chemically dependent County residents on a sliding fee basis. No provision is made to cover these fees out of grant funds since treatment itself is not part of the grant, nor would such financial assistance have demonstrated the effectiveness of the referral program as it would operate under ordinary circumstances. However, recognizing the urgency of treatment for pregnant and parenting women, arrangement was made to expedite enrollment of PASAP clients into existing programs through "reserved slots." Such preference would be justified and quite capable of being provided under a normal referral program.

Support Groups

The creation of support groups was noted a moment ago. While the support group meetings were very informal, they did have some structure to them. Of the scheduled two hours, the first half-hour and last half-hour consisted primarily of socializing, while the middle hour constituted the support group meeting. The first social period was primarily an accommodation to the fact that not everyone arrived on time, and the need to make provision for those infants brought by their mothers. During the last half-hour (or longer) participants had lunch.

Support Group Meetings

Within the support group session itself, the first half-hour was devoted to discussion of a specific self-help topic, such as building esteem, dealing with anger, resisting peer pressure, or setting goals. While this phase of the session was distinctly interactive, the interaction was guided by the PASAP counselor serving as moderator. The second half-hour was opened to discussion of whatever the clients wished. Most of the discussions centered upon individual problems such as boyfriends dealing drugs, living with actual drug users, physical abuse or sexual abuse. The clients tended to be quite open in discussion of their problems and to show great empathy for the problems of others.

Scheduling meetings at midday was a response to the wishes of the clients. Most were not employed or in school during the late pregnancy and early post-partum period and were therefore available during the day. During the evening, when support group meetings are traditionally held, family and other social obligations would have interfered.

Location

The initial meetings were held at the project staff headquarters. This location was rather unsuitable because of its sterile office atmosphere and the lack of any facilities for children. Moreover, a true demonstration of support group feasibility would require access to the types of facilities that would be available to any group desiring to conduct support groups. A number of possible facilities were examined. Unfortunately, most county facilities were in use at the time support groups were to be held.

The most widely available facility was that available in religious institutions, which are typically empty during the middle of any weekday. Moreover, the mission of religious institutions allows them to harbour substance abuse intervention programs more readily than other organiza-

tions. Nevertheless, it took a significant amount of time and energy to find a church willing to play host.

Transportation

The single largest obstacle to be overcome in setting up the support groups was finding *transportation* for the clients. Virtually none had access to automobiles of their own. The vehicles upon which they were generally dependent were typically used by the owners to commute to work and were therefore unavailable during the day. It was necessary, therefore, to provide transportation through project resources. The first effort to provide transportation involved use of a van driven by a project staff member. However, the widely dispersed geographical distribution of clients made use of a van inappropriate. A more convenient alternative was to have several staff members each pickup and return 1 - 3 individual participants.

It is unlikely that a support group operating without government funding could afford to provide individualized transportation of the type furnished under PASAP. Public transportation, where it exists, is primarily set up for commuting in and out of the city, not for getting from one peripheral location to another. The most viable transportation option appears to be the use of *volunteers*. Meetings were held with representatives of "volunteerism" organizations in Prince George's County and the Washington, D.C. metropolitan area. The use of volunteers to transport pregnant and parenting adolescents to support group meetings appears to be feasible on the condition that the volunteers could assume the role of a "sponsor" for one or limited number of clients and thus develop a kinship with them rather than simply serving as taxi drivers. They would be expected to participate in the support group meetings with the exceptions of those occasions upon which it was their turn to provide child care (in a separate room at the same facility). Unfortunately, it was not feasible to attempt to recruit volunteers for the relatively short period of the project itself.

Case Management

Another discovery of equal importance to the need for support groups was the extent to which continuity and aggressiveness were required in the case management process. The original project plan divided the Early Intervention process between two individuals, the *Counselor* who would do the screening interview and initial counseling, and the *Case Manager* who would handle the referral and followup. It quickly became apparent that effective intervention required the continuity permitted only by having the same individual handle both processes. A successful screening interview required establishing a high degree of rapport between client and Counselor, something that might take several sessions to develop. However, once developed, it was not easily transferred to a separate Case Manager. Rather, the referral process tended to work better if it evolved out the screening interview, creating one continuous intervention process.

The case management process turned out to involve a great deal more than referral and followup. First, it became a counseling process in itself. In many cases, the risks of substance abuse could be handled entirely through counseling carried out by the Case Manager. Second, even when referral to another resource was in order, it typically required an extensive period of counseling before clients would accept the referral. Clients rarely accepted referral when it was first mentioned.

The original project plan called for second year expansion of the Early Intervention Program to incorporate *siblings* of at-risk clients. This expansion was based upon the expectation that the families of substance abusing adolescent women would themselves be over-represented in the substance abusing population. If this were true, then the adolescent clients would provide an entree to other groups of at-risk youth.

As it turned out, the families of PASAP clients became involved in the program earlier and differently than expected. The notion that the families of at-risk pregnant adolescents would themselves tend to be at risk was certainly confirmed during the client interviews. Indeed, the families were often part of the risk faced by the pregnant adolescents. In many cases, it was the involvement by family members in substance abuse that formed the primary risk factor for the clients. Even when this was not the case, it frequently played a contributing role in the client's risk or was, at the very minimum, an obstacle to reducing the client substance abuse risk.

During the first year, the need for family interventions became readily apparent. In their role as Case Managers, project staff frequently visited client's homes and met with the client's siblings, parents, husband or boyfriend, or others who were part of the household. In some cases, the visits were specifically to involve family members in the interventions; in other cases the family intervention occurred as part of a house visit carried out for other reasons.

With expansion of the early intervention to include family interventions, where appropriate, the need for a separate activity aimed at siblings disappeared. The siblings, too, became part of the family intervention.

Prevention Program

In keeping with the original PASAP plan, the Prevention Program was initiated at the beginning of the second grant year. The Prevention Program consisted of:

- School Presentations
- Youth Group Presentations
- Public Information

School Presentations

The heart of the Prevention Program was a series of presentations, taking up one class hour, given in Child Development and Teen Parenting classes at 12 high schools across Prince George's County. Each presentation began with a short discussion of drugs, pregnancy, and parenting followed by the 13-minute project-developed "It's Your Life and Your Baby's" video described earlier. The remainder of the last hour was largely devoted to a discussion concerning the use of alcohol, cigarettes, and various other drugs. Where necessary, the group discussion was prompted by questions concerning people they knew who used chemical substances, what they would do if they saw a pregnant person using drugs, what harm drugs can do during pregnancy, and what type of help substance abusers might seek. A 5-minute review concluded the period. Pre- and post-tests of knowledge and behavior attitude were also administered and will be described later in a discussion of the evaluation. Following the second grant year, materials were turned over to the County Department of Education, which took responsibility of the program.

Youth Group Presentations

While presentations through high school Child Development and Teen Parenting classes formed the primary avenue by which the Prevention Program reached County teenaged women, presentations were also given to other youth groups whenever the opportunity arose. The video itself was also presented in maternal health and child health clinics for viewing by those in the waiting room.

Public Information

A brief threefold flyer was produced as a handout to be used both as a part of the intervention and prevention activities discussed thus far and to be distributed throughout the community. The flyer described: (1) the general dangers of substance use during pregnancy, (2) the specific affects of various substances upon mother and fetus, and (3) the sources of additional information and assistance. The flyer was given out in Maternal Health Clinics and schools as well as being made available to health care providers, public and private.

Questions addressed

The Pregnant Adolescent Substance Abuse Project described in this report addressed the following three major questions:

- Does a case-managed, early intervention program lead to greater use of available community substance abuse prevention and treatment resources by at-risk pregnant and parenting adolescents?
- Can a support group oriented to the specific needs of at-risk pregnant and parenting adolescents sustain participation for long enough periods to be of potential benefit?
- Will a high school substance abuse prevention program lead to improvement in knowledge and attitudes concerning the risks of substance use by pregnant and parenting adolescents?

PRODUCT DEVELOPMENT

While the primary "product" of the PASAP was the service provided its clients, one significant item of material was developed under the PASAP grant, the 12-minute, 45-second video entitled "It's Your Life — And Your Baby's." This video was developed in response to a recognized need for some means of communicating the dangers of substance abuse to pregnant and parenting women. While a great number and variety of printed materials were available, it seemed unlikely that the adolescent women making up the PASAP target population would be likely to read and retain the extensive contents of these materials outside of some course that required them to do so. A video seemed a more appropriate medium of communication than a printed page. It could be shown to women in Maternal Health Clinics during pregnancy and child development clinics after delivery. It could also be shown to groups of teenage women in classroom and other group presentations.

A review of visual material available from the National Clearinghouse for Alcohol and Drug Information (NCADI) did not reveal the existence of suitable video at the time PASAP began. Available videos were concerned primarily with chemical dependency rather than the special risk of substance abuse to pregnant and parenting women. In order to meet the need for presentation tailored to the largest population, the project staff elected to develop its own video (as had been anticipated and provided for in the grant proposal).

The grantee organization, the National Public Services Research Institute, had developed over a dozen videos to support a number of safety and health programs. In doing so, the outside services of professional talent (actors) and production personnel were typically engaged. However, a somewhat different source of competence was employed in the PASAP video development. One of the County high schools, Suitland High School, provided video instruction and production

services for the entire County. Use of this facility offered three major advantages:

- A source of teenagers to serve as talent for the video
- The opportunity to present to teenagers in the county a program prepared by their peers
- Production facilities and equipment at very little cost to the project.

In all, Suitland High School furnished 12 student performers as well as nine student extras and crew. The video arts teacher supervised the students and served as general liaison to the school, setting up auditions and rehearsals. The National Public Services Research Institute furnished the producer, assistant producer, cameraman, and technical advisor. The services of an experienced, free-lance director were secured to supervise the overall production. The production was edited at a local lab where it was mastered on a ¾-inch tape. Another ¾-inch dub master was prepared for reproducing individual copies. (Anyone desiring a ½-inch VHS copy may obtain one at duplication cost from National Public Services Research Institute).

In addition to its use as part of the Early Intervention and Prevention programs, as described earlier, the video has been made widely available throughout the County, where it appeared on local cable television networks. It has also been exhibited at OSAP Learning Communities, meetings, and copies have been provided to other OSAP grantees.

DESCRIPTION OF POPULATION SERVED

Information gathered from the PASAP client population was limited to that related to the risk of substance abuse. Because of the time required to collect this information, no effort was made to delve into the backgrounds of individual clients on any systematic basis. Therefore, no demographic information can be presented concerning parents, siblings, high school status, and so on. Except for racial background, information available was confined to substance abuse risk factors as identified through the interview process.

Table 1 summarizes the characteristics of the study sample. The first column shows the breakdown of probable risk of drug abuse determined during the interview process.

Although no income data area available on the sample, it is certain that most interviewees fall into the lower half of the County's family income range. This reflects the normal utilization of County clinics by those without private health services.

The average age of pregnant women in the program group is 18.4 years; only 11 percent are married. County-wide, 19.5 percent of all teen parents are married, the mean age is approximately 18 years. Whites are more likely to be married (28.6 percent white, 1.7 percent black). The fourth column of Table 1 shows the breakdown. Non-parametric statistical procedures revealed no significant differences in risk of substance abuse between married and unmarried teens or risk by age of the teens.

Within the county, black teens comprise the majority of cases of teenage pregnancy. Prince George's County's own numbers and the PASAP numbers are in close agreement; Prince George's County reports 68 percent of all teen pregnancies are non-whites, PASAP found 66 percent of its sample to be non-white; all but non-whites were black. Blacks, depending on the age interval, comprise between 57 and 61 percent of the County teen population.

TABLE 1

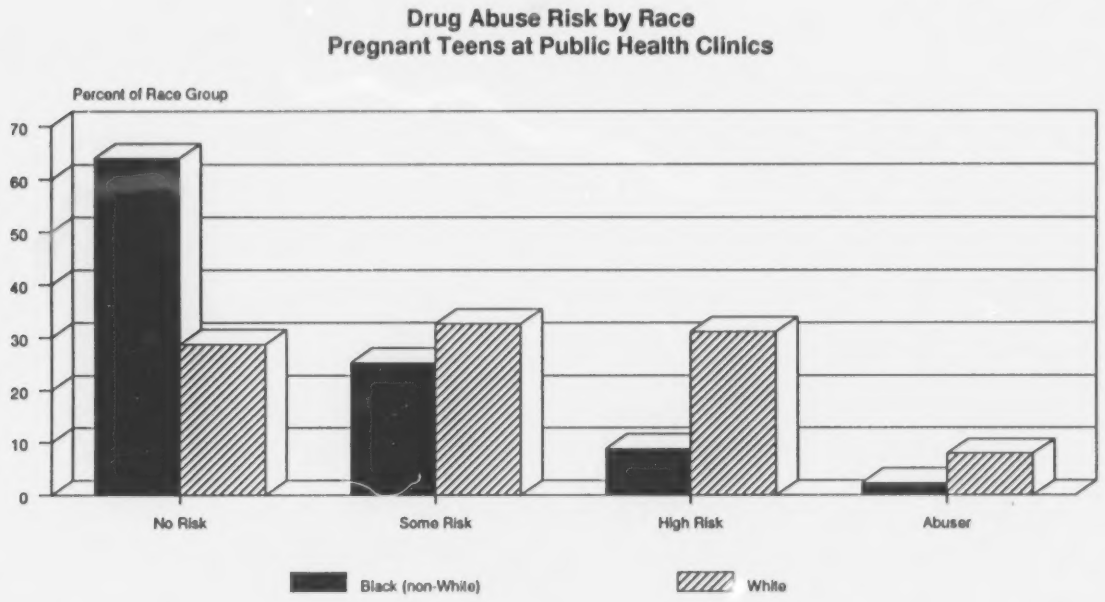
Drug Abuse Risk of Pregnant Adolescents Found in Public Health Clinics

Risk Level	Intervention Offered	Number	Age (Yrs)	Percent Married	Prop. of Race Group
No Risk:	Education only	212	18.44	10.8	
Black		172	18.37	2.3	0.64
White		37	18.77	45.9	0.29
Other		3			0.5
Some Risk	Counseling with Ed.	111	18.36	10.8	
Black		66	18.14	4.5	0.25
White		42	18.7	19	0.33
Other		3			0.5
High Risk:	Group sessions	64	18.54	14.3	
Black		24	18.35	0	0.09
White		40	18.65	22.5	0.31
Other		0			0
Abuser:	Outpatient treatment	16	18.96	0	
Black		6	18.64	0	0.02
White		10	19.16	0	0.08
Other		0			0
Overall		403	18.45	10.95	

Risk by race of the pregnant interviewee is shown in Figure 1. As the risk severity increases along the abscissa, the black representation declines steadily while the proportional white representation increases.

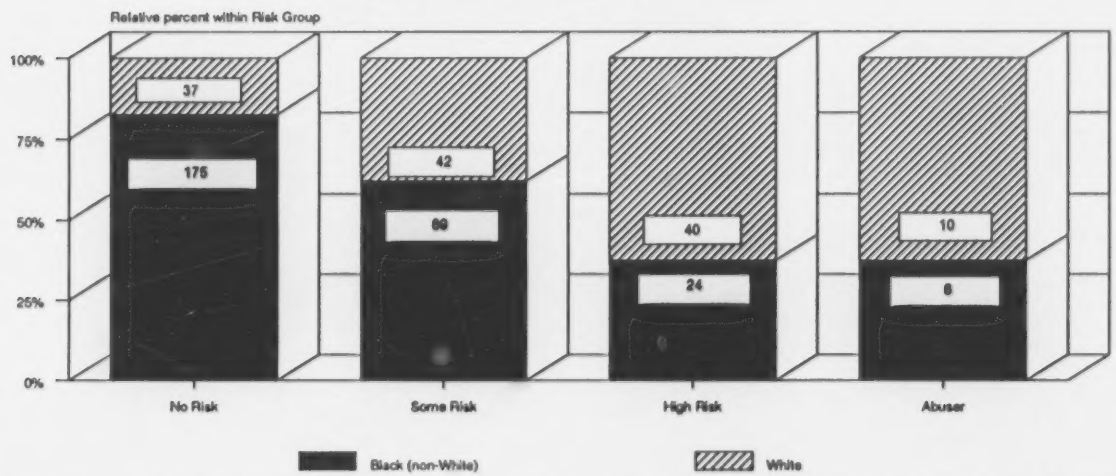
The proportion by race of those falling into each risk group is made clearer in Figure 2 where the data for each risk group are adjusted to 100 percent; the raw numbers are shown on the bar. Eighty-nine percent of all non-white interviewees were found to be in the two lowest risk groups, while only 60 percent of the white interviewees were judged to be at such minimal risk. While the actual number of black teens in the pregnant cluster is twice that of the whites, the raw number of whites in the highest risk clusters is, by contrast, nearly twice the number of blacks.

FIGURE 1



For the purposes of the prediction, the racial composition data in Figure 2 shows that among pregnant adolescents in Prince George's County Maternal Health Clinics, about two-thirds of the

FIGURE 2



high risk and abusers identified will be white. Race differences within these ordinal risk data were highly significant (Mann-Whitney U Test, P.00001,Z=7.4).

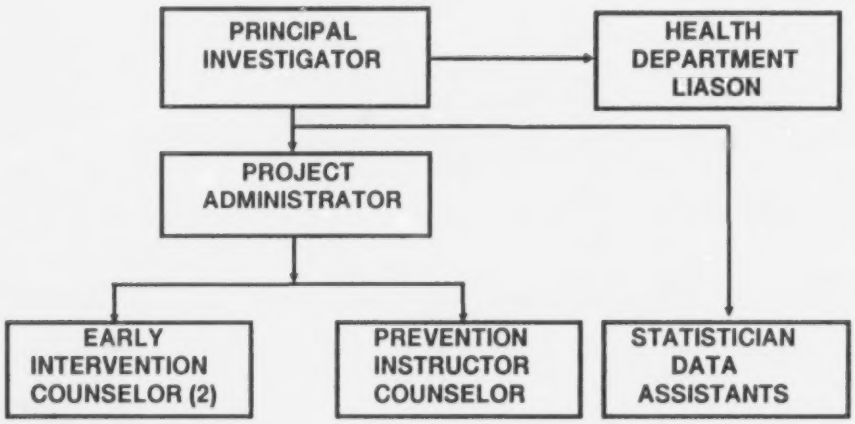
STAFFING

Staffing patterns are depicted in the Organization chart appearing as Figure 3.

Overall responsibility for the grant was assumed by the Principal Investigator, Dr. A. James McKnight, a psychologist with 35 years of research experience, the last 15 of which included the substance abuse area. His role included preparing the demonstration project plan, overseeing the development of interview protocols and project materials (including video), development of a data

FIGURE 3

PASAP Organization Chart



collection plan, interpretation of findings, and preparation of the final report. He also maintained liaison with representatives of the County Health Department and other County agencies. These meetings, involving the Principal Investigator, the Project Administrator, and the designated County Health Department liaison, Dr. John Stauder, were held on a monthly basis.

The Project Administrator, Ms. Maraya Magness, exercised day-to-day management of the Early Intervention and Prevention programs making up the heart of the PASAP. Ms. Magness is a Registered Nurse with a Master's Degree in Social Work. The fact that her most recent experience had been gained in the Prince George's County Health Department was of particular advantage in interacting with personnel of County agencies.

The Project Administrator was assisted by two Substance Abuse Counselors and one Instructor. The services of the two Substance Abuse Counselors were engaged on a half-time basis to carry out the client interviews and the followup case management process, including home visits and other followup activities. Ms. Ellen Shields was enrolled in a Master's Counseling program and had recent experience in juvenile counseling, while Ms. Rosemary Goldsmith was a Practical Nurse with recent experience in a substance abuse treatment clinic.

The Instructor, Ms. Hillary Kirk, was responsible for giving presentations in Child Development and Teen Parenting classes within the high schools as well as presentations to other groups of youth throughout the County. Working on a half-time basis, she also assisted in the Early Intervention program by conducting the interviews during peak periods. Ms. Kirk holds a Master's

Degree in Counseling with prior experience in the counseling of adolescents from dysfunctional families.

Mr. A. Scott Tippetts, Statistician, was responsible for the processing of all evaluation data, including supervising counselors and others in data entry, carrying out data reduction and statistical analyses using available statistical computer programs, and preparing appropriate tabular and graphic data displays. In addition to both undergraduate- and graduate-level training in statistics, Mr. Tippetts had conducted statistical analyses for research and evaluation purposes on over a dozen different safety and health projects.

Several part-time Research Assistants participated in various aspects of the project including data collection, preparation and distribution of materials, and data entry.

The Project Administrator, Counselors, and Instructor also assisted in the collection of evaluation data through the followup telephone interviews with former clients of the Maternal Health Clinic as will be discussed in the Evaluation section. It may be noted that the project staff remained intact throughout the two-year operational phase of the project. Once responsibility for continuation of the early intervention program was transferred to the County administration, project staff were reassigned to other projects.

Preparation of materials required under PASAP was initially the responsibility of Ms. Yvonne P. Mattocks and later Ms. Marcia L. Williams. They handled copy preparation for handouts and other printed materials, preparation of all working materials such as video scripts, correspondence, memoranda, etc. and, in the case of Ms. Williams, preparation of this final report. The eight project staff identified were evenly divided between black and white.

While not part of the project staff, several representatives of the Prince George's County Health Department contributed heavily to the activity and success of the project. Dr. Helen A. MacAllister, Prince George's County Health Officer, provided the cooperation and services of the Health Department. Mr. Michael Fuller, Director of Addictions, provided guidance throughout the entire project and made available the treatment resources employed by the project, most notably, the Drug Intervention Counseling Action Program (DICAP). Dr. John Stauder served as Liaison Officer for the project and met with the project staff on a monthly basis to help decide on the direction of the project, make arrangements for the involvement of County agencies and personnel, help resolve problems arising during the course of the project, and generally contribute the benefit of his expertise and experience in dealing with the at-risk client population.

FUNDING

Funds to support the PASAP came solely from the Office of Substance Abuse Prevention (OSAP). Funding levels for the three years were as follows:

Year One	$134,981
Year Two	$129,678
Year Three	$ 26,308

The first year's funding provided for planning, program development, and operation of the Early Intervention Program for a nine-month period. The second year involved the continuation of the Early Intervention Program plus initiation and operation of the Prevention Program. During the third and final year, responsibility for both Early Intervention and Prevention programs was to be transferred to the Prince George's County Health Department, with grant funds being applied solely to evaluation.

Although no outside funds were requested or needed, the County was called upon to provide services in the form of: (1) screening interviews by maternal health nurses, (2) treatment of clients identified as being at severe risk of substance abuse, and (3) liaison and coordination with project staff. The Department of Education also provided services in the form of teachers and administrators to assist in planning of the Prevention Program in Teen Parenting and Child Development classes as well as assisting the PASAP Instructor giving the course itself. The participation of Suitland High School in production of the video "It's Your Life — And Your Baby's" was described under Project Development.

During the first year, initiation of the Early Intervention Program, scheduled to take place at the beginning of the second quarter of the grant year, was delayed until the third quarter by the need to pilot test the program in one Maternal Health Clinic before being applied on a countywide basis. For this reason, it was necessary to transfer some unexpended first year funds into the second year. And, since the first year delay necessitated extending the early intervention and prevention efforts into the first quarter of the third year, some funds were carried over into the third year.

EVALUATION

The PASAP was evaluated in terms of both the *processes* required to carry it out and the *outcomes* resulting from those processes.

Process Evaluation

For discussion purposes, the processes can be divided into two categories: *Early Intervention* and *Prevention.*

Early Intervention

The Early Intervention phase consumed approximately 18 months, six months during the first year of the grant and the entire second year of the grant. During the third year, responsibility for the Early Intervention Program was shifted to County Personnel.

Over the 18 months of the Early Intervention phase, a total of 403 pregnant adolescents were interviewed through Prince George's County Maternal Health Clinics. Table 1, presented earlier, provided a breakdown of the sample.

The individual counseling was carried on by project staff Case Managers and included, in addition to client contacts, home visits (134) and other contracts with family members (42) as well as meetings with representatives of various County agencies, including substance abuse treatment, social services, housing, criminal justice and child protective services (75).

Prevention

The heart of the Prevention Program was a series of presentation classes conducted in Child Development and Teen Parenting classes of 12 County high schools. The following statistics summarize the magnitude of this effort:

Nature of Effort	Number
Classes Taught	76
Students Taught	1900 (approx.)
Pregnant/Parenting Teenagers Taught	55
Students Counseled	92

The exact number of students is not known since attendance was not taken in each class. However, given the number of classes taught, and class size estimated from rosters, the number given (1900) is a reasonably reliable estimate.

Community Presentations

In order to carry on the Early Intervention and Prevention programs this effectively, it was necessary to acquaint personnel of County agencies and organizations with the nature and purpose of PASAP. Familiarizing others with PASAP facilitated both *referral* of at-risk pregnant and parenting adolescents to the PASAP program and cooperation between PASAP and other agencies in dealing with them. To acquaint people around the County with PASAP, project staff personnel arranged to participate in meetings held by various County agencies in order to give presentations on the nature and purpose of PASAP. The number of people familiarized with PASAP through this avenue of communication summarized as follows:

Type of People	Number
School staff (Teacher/Counselor)	26
Criminal Justice	4
Substance Abuse Treatment Providers	50
Health Care Providers	69
Youth Service Providers	60
Total	159

Outcome Evaluation

The outcome evaluations employed to assess the Early Intervention and Prevention programs took rather different courses. The two of them will be discussed separately.

Early Intervention Program

The object of the Early Intervention Program was to see that pregnant and parenting adolescents at-risk of substance abuse were referred to appropriate services within the County. The success of the program is logically measured in terms of the number of individuals referred. Successful referral involves more than simply pointing the client in the right direction; it involves the groundwork and followup needed to make sure they reach the appropriate service and remain with it long enough to benefit from it.

As was explained earlier, the substance abuse services available within the County are primarily those intended for the chemically dependent. There are really no individual services designed for those who are deemed only to be at risk of substance abuse. For most people the potential for substance abuse is not sufficient cause to take action. However, the special characteristics of the pregnant and parenting adolescent population make intervention appropriate at lower levels of risk than would be the case for most other target populations. Indeed, it quickly became apparent, that a small minority of those judged to be at risk required treatment. For most of those at risk, individual and/or group counseling were more appropriate. Since this resource was largely lacking, providing treatment became the focal point of the Early Intervention Program.

Analysis of Referrals

Table 2 displays the results of referral to individual counseling, group counseling, and treatment.

TABLE 2

	Response					
Referral	**Attended**	**Prevented**	**No/Show**	**Refused**	**Other**	**Total**
Counseling	56	10	6	7	32*	111
Group Counseling	13	13	28	8	2	64
Treatment	8	-	-	7	1	16
Total	77	23	34	22	35	191

*** NOTE: This total includes 27 referrals whose disposition is unknown.**

Of 191 referrals to some form of help beyond education, we can see that 77 (40 percent) involved referral to some form of counseling and treatment and resulted in clients actually attending. About two-thirds of these successful referrals involved counseling, provided primarily by the Case Managers themselves. Some 13 women participated in the group counseling sessions. Eight were referred to and participated in treatment, two being ultimately referred to residential treatment.

Twenty-three individuals agreed to accept referral to counseling but were *prevented* from participating because of scheduling or transportation problems. They did, however, continue to receive individual counseling and made up some of the 56 individuals in that category. There were no instances in which treatment could not be arranged.

Some 34 clients accepted referrals but simply *failed to show up*. Again, this did not occur in the treatment category. Those accepting treatment were followed up sufficiently to make sure they received it.

Twenty-two clients simply *refused* to accept the referral offered them. Of the seven refusing treatment, six agreed to accept counseling as an alternative. The 35 individuals making up the "other" category were unavailable to accept referrals. Most of them moved outside of the area.

Before and After Comparison

The analysis of referrals strongly suggests that the PASAP program was effective in inducing numbers of at-risk treatment and parenting adolescents to take advantage of available remedial resources. However, it is not proof that such was so —how many would have made use of the same resources in the absence of PASAP?

This question can only be answered in making *comparisons* between the outcome achieved with at-risk pregnant adolescents subject to PASAP and a comparable group not eligible to benefit from PASAP. The most comparable groups would be random samples of at-risk pregnant/parenting adolescents selected before and after PASAP went into effect. The ability to select such groups was somewhat hampered by the fact that PASAP was initiated within six months after the grant was awarded. By the time a method for identifying at-risk populations was developed, PASAP had already gone into effect. However, it was possible to make use of historical records within County agencies to identify comparable individuals during the years preceding and following implementation of PASAP. To maximize comparability, the comparison was confined to the year immediately preceding and immediately following the start of PASAP. Somewhat different approaches were employed to evaluate the *information/education vs treatment* elements of the early intervention program.

Information/Education — If PASAP was effective in reaching pregnant adolescents with information concerning drug use, then the amount of drug information that maternal health clients report having received should be greater in the year following PASAP than the prior year. To ascertain whether this is true, samples of Maternal Health Clinic clients were obtained from the records of those entering the clinics during the immediate pre-PASAP and post-PASAP 12-month periods. The clients from each group were contacted by telephone exactly one year following the date they delivered their child. Because the population involved is a highly transient one, it proved very difficult to reach them after a period of one year. Of something under 200 adolescents participating in the Maternal Health Clinic in the year *prior* to PASAP, it was possible to reach 44 at the same telephone number. The one-year followup of pre-PASAP clients continued throughout the first year of PASAP.

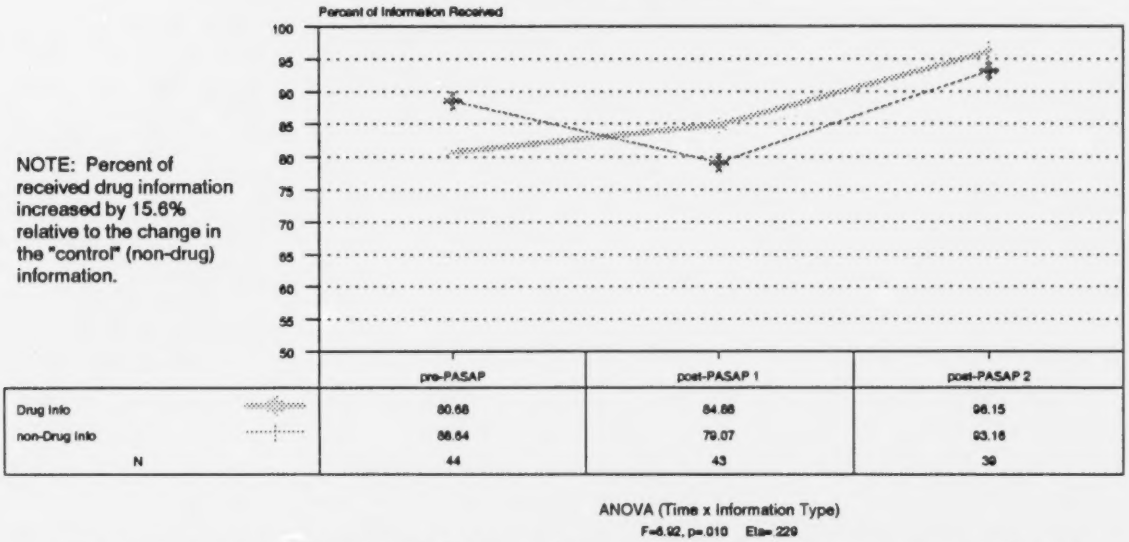
At the beginning of the second year, the one year followup automatically began to pickup clients that attended the clinics during the PASAP period. The post-PASAP sample was configured so as to match the PASAP sample with respect to birth date. A total of 43 post-PASAP clients were tracked down and surveyed.

The purpose of the survey, as presented to the clients, was to obtain an appraisal of the services provided to the clinic, and most of the questions asked related to nature and quality of service. However, they were also asked whether they had received information of various types. Three categories concern the hazards of hazardous substances: tobacco, alcohol, and drugs. In order to help distinguish pre-/post- changes in information concerning harmful substances from just changes in the general amount of information clients receiving, or changes in receptivity of the client population itself, they were also asked about information received in three unrelated categories: nutrition, rest, and prescription drugs.

The results of the telephone survey are shown in Figure 4.

FIGURE 4

Before-After Comparison of Drug Information Received by Client (vs. "control" non-drug information)



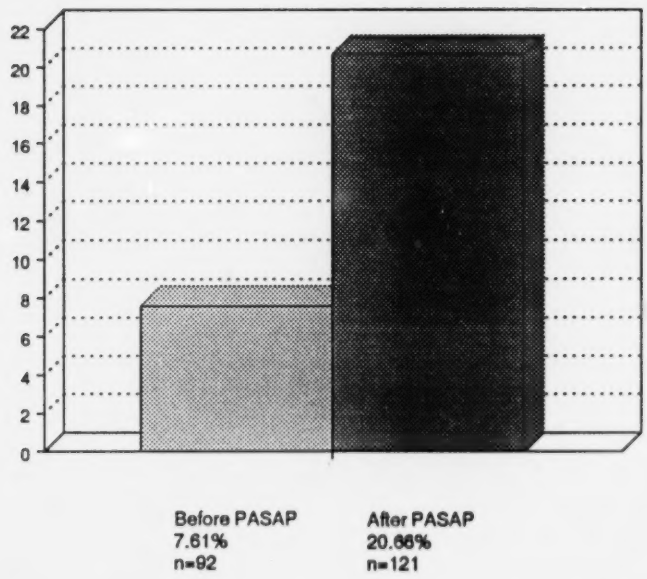
The "percent" value along the left side of the figure represents the mean percent of the three items of information that clients reported receiving. It is evident that the average client receives information on between two of the three items (67 percent) and over all of the items (100 percent) for both categories of information. However, there was a slight increase in drug information, from 81 percent during the pre-PASAP year to 85 percent and 96 percent for the two post-PASAP years. At the same time we see a decline from 89 percent to 79 percent and up to 93 percent on information unrelated to drugs. What this suggests is that, while conditions within the clinics were resulting in an overall decline of health information, information concerning harmful substances increased. The increase in drug information, relative to the change in non-drug information, was statistically significant in an Analysis of Variance. The effect of the PASAP was evident in a *time* (pre- vs post-) *by information* (drug vs non-drug) interaction which was statistically significant ($F=6.92$, $p=.01$). The increase in drug-related information amounted to 15.6 percent, relative to the non-drug information.

Treatment — It would not have been feasible to assess changes in treatment referrals in the same manner as information and education owing to the extremely small proportion of maternal health clients who were referred to treatment and the even smaller proportion who accepted treatment. To study the effect of PASAP upon treatment, we employed the reverse process: that is, we examined the records of treatment agencies to determine what proportion of their clients *came from* the pregnant/parenting adolescent population.

The records of the county Drug Intervention Counseling Program (DICAP) were examined to identify all adolescents entering treatment during the year immediately prior to and immediately following implementation of PASAP. Figure 5 shows the proportion of adolescent clients who were either pregnant or parenting at the time they entered DICAP. The reason for including parenting adolescents was that many PASAP-initiated referrals to treatment did not actually result in entry to DICAP until after delivery.

FIGURE 5

Percent of DICAP Adolescents Who are Pregnant and Parenting



The figure shows what amounts to almost a three-fold increase in the proportion of DICAP adolescents who would have fallen under the PASAP program, that is, they were pregnant or parenting. This increase is statistically significant (chi square = 6.97, p .01).

There is, of course, no assurance that the results shown in Figure 5 are due to PASAP. Other forces operating within the County could have increased the numbers of pregnant and parenting clients within the adolescent population. However, any general increase in substance abuse or pregnancy by adolescents within the County would affect the total numbers in the sample but not the proportions presented. It therefore seems likely that the majority of referrals to treatment achieved through PASAP would not have occurred in its absence.

Prevention Program

The Prevention Program consisted almost entirely of a 50-minute classroom presentation and discussion followed by a 15-minute followup approximately two weeks later. The conventional way of measuring the effects of classroom education, is by administering measures of knowledge, attitude, and behavior (KAB) with the same students immediately prior to and following participation in the program. Since the behavior being taught rarely occurs in the classroom, post-tests of behavior involved in either reports of *behavioral intent* or reports of *actual behavior* collected after a lapse of time.

In PASAP, collection of behavioral reports after a lapse of time would not have been feasible for several reasons. First, the majority would not be likely to qualify as pregnant or parenting for a long time to come, many years for some. Second, even among those who became pregnant or parenting adolescents, the effects of the program upon their use of substances might take a long time to manifest itself. Finally, questions about actual substance use are likely to prove highly

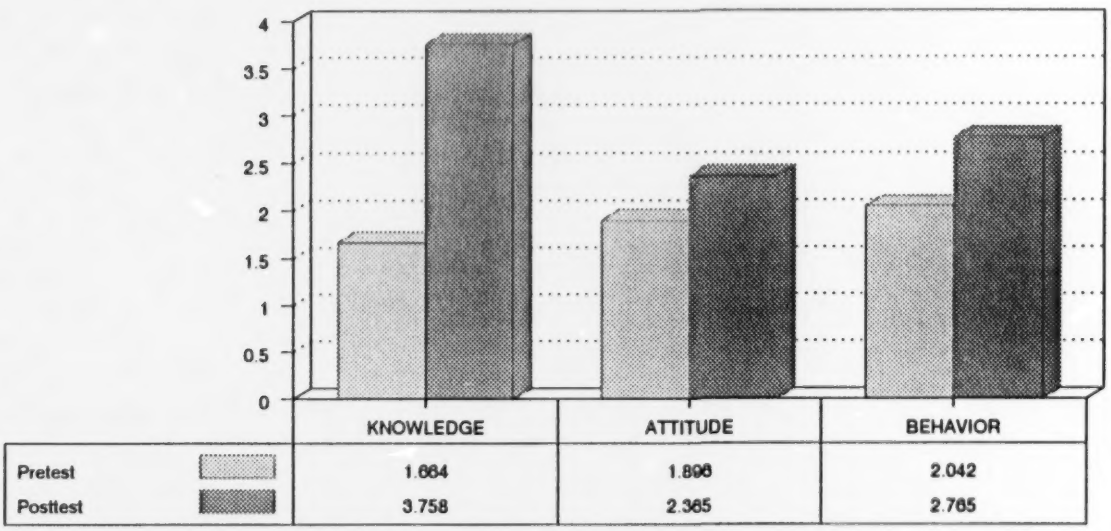
sensitive. Therefore, students were only asked to report their intent, that is, what they *would do* in the future with respect to various substances.

Tests were administered to students only after the first semester, a total of 876 students. Because it was necessary to administer both pre- and post-tests within the 50-minute classroom period, the number of questions had to be severely limited. The PASAP project staff developed an 10-item test intended to sample from the knowledges, attitudes, and behaviors making up the objectives of the course. The list included 4 knowledge, 3 attitude and 3 behavior intent items.

The results obtained from pre-/post-test administration of the KAB test are shown in Figure 6. The scope of the Knowledge Test represents the mean number of items correct, while the attitude and behavior scores represent mean response values where "4" is the most favorable and "1" the least.

FIGURE 6

Mean Scores on Knowledge, Attitude, and Behavior Measures



The differences in sample sizes reflect the way in which unanswered items were handled. In the Knowledge test, these items not answered were presumed to indicate the student's lack of knowledge and were scored as including "incorrect." However, this assumption obviously does not apply to the Attitude or Behavior measures. Since there was no logical way of handling unanswered items in these measures, any tests containing such items were not scored.

Only those subjects completing pre-test and post-tests were included in the sample. Since any pre-/post-comparisons must be based upon the same subjects, this step was a necessity. Elimination of those taking only one test reduced the test sample from 876 to 768 students. Incomplete Attitude and Behavior Tests further reduced the totals for those measures.

As is typically the case in education programs, knowledge of the subject matter showed the greatest improvement — over a twofold increase. Not only is it easier to convey information than to alter attitudes or behavior, but since it is largely through knowledge that attitude and behavior are affected in an educational program, it takes relatively larger changes in the former to produce relatively smaller changes in the latter. The fact that behavior changes are of the same general

magnitude as changes in attitude (actually, slightly greater), is attributable to the fact that the test measures *behavioral intent*, rather than the actual self-reported observed behaviors. Because of the large sample sizes, the differences are highly significant for *knowledge* ($F=1530$, $p<.001$), *attitude* ($F=240$, $p<.001$), and *behavior* ($F=717$, $p<.001$)

It is certainly not unusual to obtains substantial knowledge gains, from an education program. However, the twofold increase in knowledge is unusual for safety and health programs, which are often as much concerned with getting people to practice what they know as it is to teach new things. The sizeable knowledge gains in the PASAP Prevention Program may derive as much from a low state of initial knowledge as to the quality of the program itself. While no people were found to be fairly knowledgeable about drugs and alcohol generally, it is clear that in a largely ignorant of substance use in relation to pregnancy. They averaged 1.7 items correct where they would have been expected to get one item correct through sure guesswork. The improvement over chance scores is more than threefold.

The improvement in attitude and behavioral intent is not as meaningfully quantified as increases in knowledge items answered correctly. Both measures involved means scores on an arbitrary scale. The gain in mean attitude scores represents about ½ the standard deviation pre-test score, a meaningful shift towards more positive attitudes, but far from a wholesale attitude change. However, the changes in behavioral intent amounted to approximately 1.5 standard deviations, meaning that about 93 percent of the students expressed intentions on the post-test that were more favorable than the mean score on the pre-test.

FINDINGS/ACCOMPLISHMENTS

As far as attributing services is concerned, the Pregnant Adolescent Substance Abuse Project, (PASAP) provided:

- Informational materials to over 400 pregnant and parenting adolescents
- Individual and group counseling to 69 pregnant and parenting adolescents believed to be at risk of substance abuse
- Treatment to 8 pregnant and parenting adolescents believed to be substance abusers
- An educational program exceeding one hour to approximately 1900 adolescents in Child Development and Teen Parenting classes
- Individual or small group counseling to 92 high schools students having problems or concerns relating to harmful substances and pregnancy.

Among women in Maternal Health Clinics, the PASAP program appeared to reach approximately 15.6 percent more pregnant adolescents with 16% more tobacco, alcohol, and drug information than would have otherwise been the case. The numbers of pregnant adolescent substance abusers making use of the County's substance abuse treatment facilities increased to almost *threefold.*

Among high school students in Child Development and Teen Parenting classes, knowledge concerning the effects of tobacco, alcohol, and drugs upon the unborn child, and upon the adolescent mothers ability to cope with the stresses of parenting more than doubled. Instruction also produced significant shifts in attitudes and expressed behavioral intent towards disuse of harmful substances.

Probably, the single greatest accomplishment achieved under the PASAP grant was not the services provided on the grant itself, but rather those that were handled by the County because of the grant. The Prince George's County Health Department had committed itself to implementation of the PASAP as a County activity in the event the program was to prove successful. By the end of the first year of the program, Health Department officials were sufficiently convinced that the program was meeting a need as to seek and obtain authorization and funding for four half-time positions to continue the Early Intervention Program. In accordance with the project schedule, this responsibility for the Early Intervention component of the program was transferred to the County at the beginning of the third grant year. PASAP personnel trained the County case workers in the screening and referral processes working with them over the period of several weeks to assure a smooth transition.

The original PASAP plan called for intervention with siblings and other family members during the second year of the project. What occurred was not strictly in accordance with that plan. Family intervention was actually initiated during the first year of the project as a means of involving family members in the client intervention. While the purpose of the family intervention was to benefit the clients rather than their siblings or parents, it was not possible or even desirable to maintain this limitation. Therefore, family members were drawn into the intervention to the extent that seemed appropriate.

While family intervention was introduced earlier than anticipated, it did not go as far as expected. Intervention with family members for their own sake, which was to have started during the second year, rarely took place. The interest of counselors clearly lay with the client. While the scope of their efforts could be expanded to encompass family members, it could not be transferred from clients to family members. Left out of the active intervention process were, for example, siblings of clients who were involved not only in the use of drugs but in their sale, as well as some parents who began recreational use of drugs during the Sixties and never gave it up. While efforts were made to see that these family members obtained help, the level of effort never approached the intensity of the intervention directed at the adolescent clients.

Nothing took place under PASAP that can not be implemented elsewhere, nor is there any reason why the results obtained could not be duplicated in any community. One change in the program should be contemplated wherever an effort to reduce the threat of a substance by pregnant or parenting teenagers is considered: expansion of the program to include all ages, not simply adolescents. The restriction to adolescents in the original PASAP was necessary in order to stay within the scope of the grant program, that is, High Risk Youth. However, in an operational, locally funded program, such an age distinction would be entirely arbitrary. A survey of over 193 pregnant women over age 21 carried on coincident with the PASAP, and using the same risk factors as employed in PASAP, revealed a significantly greater level of risk among the adult group (chi square = 12.19, p.01). The differences came primarily from the "abuser" and "high risk" categories; the proportion of "low risk" were the same. These results are constant with the impressions of health care providers that heavy use of alcohol or drugs and chemical dependency are more characteristic of an adult than adolescent pregnant and parenting population.

PROBLEMS

While a great number and variety of problems were encountered during the course of PASAP, three were of such magnitude and generality as to warrant discussion. They were:

- Access to pregnant and parenting at-risk women
- Maintaining continuity in case management
- Unavailability of support groups

Access to At-Risk Pregnant and Parenting Women

Although it is not the biggest problem, the first problem to confront anyone attempting to intervene in the use of harmful substances by pregnant and parenting women is gaining access to that population. Identifying individuals who are at risk due to the use of various substances is difficult in any population. Among pregnant and parenting women, the problem is magnified by the high risk that can accompany any use of tobacco, alcohol, or drugs. Since few are likely to realize that they are at-risk, the numbers seeking help on their own are likely to be extremely small, if at all.

Maternal health care provides at least one route of access to the at-risk pregnant population. It is true that those at the highest risk levels tend not to be represented in the population of women who are sufficiently concerned about their help and that of their babies to seek prenatal care. However, the lower risk levels are well represented by this group, particularly those receiving their maternal care through public health clinics. Meanwhile, the fact that the risk level falls short of chemical dependency and the fact that the client population was sufficiently concerned with health matters to seek prenatal care are both favorable signs with respect the potential effectiveness of early intervention.

In summary, while maternal health facilities do not provide access to those at the highest risk of and for substance abuse, they do provide access to a population presenting sufficient risk to a warrant intervention effort as well as being one that is more likely to benefit from intervention efforts than those at greater risk.

Maintaining Continuity in Case Management

Another obstacle in the way of attempts to ameliorate the risk of substance abuse among any group is their reluctance to admit the extent of those risk. Obviously, people who don't believe themselves to be at risk are not likely to seek or accept help. While PASAP did not overcome this problem, it did successfully cope with it in most instances. The means of doing so turned out to be one of the more innovative aspects of the project.

The best — and about the only way of overcoming the denial of risk among clients, and paving the way for acceptance of referral was through the bond that developed between the Case Manager and client. This bond, where it occurred, was first formed during the screening process through which risk factors were identified. It might take several contacts before risks were fully identified by the interviewer, even more before they were acknowledged by the client, and even more before the process resulted in any form of remedial activity. The screening and referral processes merged into one activity with no clear demarcation between the two processes.

The importance of maintaining continuity from initial contact, through the screening, referral and followup processes were well demonstrated in PASAP. The relationship established between Case Manager and client played a major role in (1) developing client insight into the risk they

entailed by use of tobacco, alcohol, and other drugs (2) inducing clients to recognize the need for some form of remedial assistance in reducing the risk, and (3) representing them in remedial programs despite periodic lapses or outside problems. The relationship of Case Manager to client was maintained through enduring contact which included telephoning the client to check on status and progress, being available to respond to calls from clients, visiting clients to observe surroundings and initiate family interventions, and dealing with outside agencies and organizations on the client's behalf.

Unavailability of Support Groups

While groups were available to provide psychological support to people recovering from dependency upon alcohol and upon other drugs, they did not fully meet the need of the PASAP client population. Males recovering from chemical dependency had little in common with pregnant and parenting women whose risk came nearly from use of chemical substances. As explained in the description of PASAP, support groups tailored to the needs of pregnant and parenting teenagers were established and operated within the project itself. While the benefits of support groups were amply demonstrated, the feasibility of maintaining them in a operational setting was not. Whether the means of providing facilities, transportation, and infant care on a self-sufficient basis, or at sufficiently low cost to secure local government funding can be found is a question unanswered by this demonstration project. Answering this question is a worthy undertaking for a demonstration project of its own.

APPENDIX A

1. **Year of Birth** _____

2. **Marital Status:**
   a. Single
   b. Married
   c. Living with boyfriend
   d. Other, please specify: _____

3. **Race**
   a. Black
   b. White (non-hispanic)
   c. Puerto Rican, Chicano, or other Latin American
   d. Asian
   e. Other, please specify: _____
   f. Refuses

4. **Education:**
   a. No schooling
   b. Elementary School (8th grade or less)
   c. Some high school
   d. High school graduate or GED
   e. Training or experience in a trade
   f. Some college
   g. College graduate, i.e., Associate or Bachelor's degree

5. **What do you see for yourself in the future?**
   a. Stay at home, take care of children
   b. More education
   c. Stay with my current job
   d. Getting a job
   e. I have no future plans
   f. Other, please specify: _____

6. **Occupation: Please describe your occupation:** _____

7. **Pregnancy history: Number of:**
   a. _____ miscarriages
   b. _____ abortions
   c. _____ children
   d. _____ stillbirths or death of a child

8. **Does anyone in your family smoke cigarettes, pipe or cigars?**
   _____ a. Yes _____ b. No

9. **Do you smoke cigarettes?**
   a. No, never
   b. In the past, but not now
   c. Yes, currently, how many cigarettes per day do you smoke? _____

10. **Where have you learned the MOST of what you know about drugs and/or alcohol: (check all that apply)**
    _____ a. My family
    _____ b. School or church
    _____ c. My friends or people I hang out with
    _____ d. TV, radio, newspapers, magazines
    _____ e. Health department, my doctor, nurse
    _____ f. Other _____.

11. **Do any of your friends smoke cigarettes, pipe or cigars?**
    _____ a. Yes _____ b. No

12. **Has anyone in your family EVER used drugs, such as marijuana, uppers or downers, PCP, cocaine, or heroin?**

_____ a. Yes _____ b. No _____ c. I don't know

13. **How do you spend your spare time? (check all that apply)**

_____ a. Watch TV
_____ b. Read
_____ c. Go to bars or nightclubs
_____ d. Go to church or other community activities
_____ e. Cruise around with my friends or just hang out
_____ f. In sports, as participant or spectator
_____ g. Relax alone or with my family
_____ h. Get "high"
_____ i. I have no spare time

14. **How often does the heaviest drinker in your family consume alcohol (beer, wine, hard liquor)?**

_____ a. Very often (e.g., every day)
_____ b. Often (e.g., usually every weekend)
_____ c. Occasionally (e.g., parties, celebrations)
_____ d. Rarely (e.g., special events)
_____ e. Never

15. **During the past few months, have you ever felt: (check all that apply)**

_____ a. Sad
_____ b. Nervous or afraid
_____ c. Lonely or alone
_____ d. Hopeless
_____ e. Worried
_____ f. None of the above

16. **How often do you go to parties where there is drinking - beer, wine, hard liquor?**

_____ a. Very often
_____ b. Often
_____ c. Occasionally
_____ d. Rarely
_____ e. Never

17. **Which of the following topics cause disagreements in your family?**

_____ a. Relatives, family
_____ b. Money
_____ c. Alcohol
_____ d. Use of the car
_____ e. Watching TV
_____ f. Helping around the house
_____ g. Drugs
_____ h. Discipline
_____ i. Cigarette Smoking
_____ j. Sex
_____ k. Other _____

18. **How often do you and your friends talk about drugs?**

_____ a. Very often (e.g., every day)
_____ b. Often (e.g., once a week)
_____ c. Occasionally (e.g., when something has happened on the news about drugs)
_____ d. Hardly ever
_____ e. Never

19. **Do you have problems or worries about: (check all that apply)**

_____ a. School
_____ b. My family
_____ c. Drugs
_____ d. Boyfriend, husband
_____ e. Pregnancy
_____ f. Alcohol
_____ g. Job
_____ h. Money
_____ i. Becoming a parent
_____ j. I have no problems/worries

20. What do you believe are important things to do during pregnancy?

_____ a. Be with my family, boyfriend or husband
_____ b. Exercise, such as walking
_____ c. Avoid drugs
_____ d. Eat healthy foods, drink milk
_____ e. Keep clinic appointments
_____ f. Take my vitamins
_____ g. Avoid alcohol

21. How often does a family member, or a person important to you use drugs or alcohol.

	Very Often	Often	Occasionally	Rarely	Never
Alcohol (beer, wine, whiskey)					
Cocaine (Blow, toot)					
Speed					
Crack					
Downers					
PCP (Lovely, Greens)					
Heroin (H, smack)					
LSD (acid) other hallucinogens					
Marijuana					

22. How often have you been offered the following drugs.

	Very Often	Often	Occasionally	Rarely	Never
Alcohol (beer, wine, whiskey)					
Cocaine (Blow, toot)					
Speed					
Crack					
Downers					
PCP (Lovely, Greens)					
Heroin (H, smack)					
LSD (acid) other hallucinogens					
Marijuana					

23. How often did you use the following drugs BEFORE you knew you were pregnant:

	Very Often	Often	Occasionally	Rarely	Never
Alcohol (beer, wine, whiskey)					
Cocaine (Blow, toot)					
Speed					
Crack					
Downers					
PCP (Lovely, Greens)					
Heroin (H, smack)					
LSD (acid) other hallucinogens					
Marijuana					

23. How often do you use the following drugs:

	Very Often	Often	Occasionally	Rarely	Never
Alcohol (beer, wine, whiskey)					
Cocaine (Blow, toot)					
Speed					
Crack					
Downers					
PCP (Lovely, Greens)					
Heroin (H, smack)					
LSD (acid) other hallucinogens					
Marijuana					

25. Have you ever had treatment for a drug or alcohol problem?

_____ No _____ Yes

If you answer NO you have completed the questionnaire.
If you answer YES. Please continue to question 26.

26. Which did you receive treatment for?

Alcohol _____ Cocaine/crack _____ PCP _____ Heroin _____
Other _____

27. Please check all that apply:

Date

Treatment was.....

Residential _____
Outpatient _____
Completed _____
Did not complete _____

28. Are you attending an aftercare program? (including NA, AA)

_____ Yes _____ N

Goal 1: To increase the proportion of pregnant adolescent substance abusers participating in remediation (i.e., education, counseling, and treatment) in Prince George's County.

Objective	Activity	Target Date	Actual Date
1.1. To identify pregnant adolescents who are substance users/-abusers in Prince George's County	1.1.1 Design a questionnaire to screen pregnant adolescents for their substance use, and other factors indicating "at risk" for substance use.	10/87	11/87
	1.1.2 Test questionnaire in Anne Arundel County Maternity and revise the questions.	11/87	11/87
	1.1.3 Implement urinalysis screening for alcohol/drug use.	1/88	
	1.1.4 Train Health Nurses to identify substance abusers and extent of abuse.	1/88	3/88
	1.1.5 Provide materials to accompany training presentation.	1/88	1/88
	1.1.6 Interview patients if there are any factors indicating substance abuse, substance is indicated, refer patient to treatment.	1/88-12/89	1/88
	1.1.7. Inform patient to drugs/alcohol effects on the fetus and parenting.	1/88-12/89	1/88

Goal 1: To increase the proportion of pregnant adolescent substance abusers participating in remediation (i.e., education, counseling, and treatment) in Prince George's County.

Objective	Activity	Target Date	Actual Date
1.2 To induce pregnant adolescent substance abusers to obtain help from appropriate remediation services.	1.1.8. Design intake/evaluation forms to gather assessments, evaluate and refer patients to treatment/counseling	11/87	12/87
	1.2.1 Inform Prince George's County Health Department. drug/alcohol programs, youth services, the county's adolescent social services and large organizations of PASAP.	1/88	12/87
	1.2.2. Compile a list of remediation resources, describing the services, and the contact person of each facility.	1/88	1/88
	1.2.3 Refer pregnant adolescent substance abusers to remediation services.	1/88-12/89	3/88
	1.2.4. Monitor client progress on the form designed as the "Client Status Report".	2/88-12/89	4/88
	1.2.5. If client does not comply with treatment, investigate a to the reasons for non-compliance and seek return to treatment.	2/88-12/89	4/88
	1.2.6 if client does not comply with treatment, investigate as to the reasons for non-compliance and seek return to treatment.	2/88-12/89	4/88
	1.2.6 Meet with family members to facilitate referral to remedation services.	1/89-12/89	4/88
	1.2.7. Conduct peer counseling support groups for non-abusive users.	Not Planned	3/88

Goal 2: To increase the awareness of pregnant adolescents in general as to the dangers of substance abuse.

Objective	Activity	Target Date	Actual Date
2.1 To increase the awareness of pregnant adolescents as to the effect of substance abuse on the child.	2.1.1. Consult with Prince George's County Health and Education Department (1) to coordinate community activities with PASAP; (2) to assist PASAP in obtaining entry into the other organizations and supplying educational materials for presentations.	1/89-12/89	2/88
	2.1.2. Design and produce informative materials advising adolescents of the effects of substance use during pregnancy.	11/88	3/88
	2.1.3 Design and produce an audio-visual presentation depicting the effect of substance abuse on the lives of the adolescent mother and child.	11/88-2/898	4/88-8/88
	2.1.4 Provide presentations to area high schools, maternity and family planning clinics, youth groups, and women's organizations.	10/88-12/89	5/88

Goal 3: To assess the effectiveness of PASAP in fulfilling its program goals.

Objective	Activity	Target Date	Actual Date
3.1 To assess the effect of PASAP upon participation of pregnant substance abusers in remediation programs.	3.1.1 Examine and arrange for access to client records maintained by County agencies.	1/88-3/88	1/88
	3.1.2 Analyze records of substance abuse remediation agencies for patients admitted in 1987 to determine the number and proportion of pregnant adolescents receiving services related to substance abuse.	1/88-4/88	1/88
	3.1.3. Repeat activity 3.1.2. for 1899 patient.	4/89-4/89	1/89
	3.1.4. Repeat activity 3.1.2. for 1989 patient.	1/89-2/89	1/90
	3.1.5. Perform statistical analyses to assess the effect of the PASAP upon numbers of pregnant adolescents in treatment and the interaction of program effects with characteristics of patients and treatment	1/90-2/90	2/90

Goal 3. To assess the effectiveness of PASAP in fulfilling its program goals.

Objective	Activity	Target Date	Actual Date
3.2 To assess the effect of the PASAP information program upon the pregnant adolescent's awareness of the dangers of substance abuse upon themselves and the fetus.	3.2.1. Develop survey instrument capable of measuring knowledge and the attitudes toward the effects of substance abuse during pregnancy upon mother and fetus.	3/88-4/88	5/88
	3.2.2. Assess the reliability of the instrument developed in 3.2.1.	5/88-6/88	6/88
	3.2.3 Select a sample of pregnant adolescents throughout the year prior to introduction of the PASAP public information program (1988)	10/88	10/88
	3.2.4 Administer the instrument developed in 3.2.1. to the sample selected in 3.2.3	11/88	1/89
	3.2.5 Select a random sample of pregnant adolescents during the year following the introduction of the PASAP public information program (1989)	10/89	10/89
	3.2.6 Administer the instrument developed in 3.2.1. to the sample identified in 3.2.5.	11/89	2/90
	3.2.7 Analyze the results of the survey in order to assess the effect of the PASAP public information program upon the knowledge and attitudes of pregnant adolescents.	5/90	7/90

Goal 3: To assess the effectiveness of PASAP in fulfilling its program goals.

Objective	Activity	Target Date	Actual Date
3.3. To assess the effect of the PASAP upon the incidence of substance abuse among pregnant adolescents.	3.3.1 Arrange for access to birth records from County and/or State agencies.	2/87	Deleted*

***Unable to gain access to State records**